

## MARS FAMILY

### MARS-5000-24GTM/C



- High speed and high quality image
- 2" global shutter CMOS sensor
- Compatible with GenICam™ and GigE Vision®
- 10GigE interface
- 1 programmable GPIO
- 50 megapixels
- Optional Fan

The MARS-5000-24GTM/C camera is a newest member of DAHENG IMAGING's MARS family high bandwidth industrial digital camera, featuring high resolution, high definition and low noise.

The MARS-5000-24GTM/C is a monochrome/color GigE Vision camera with the Gpixel GMAX3249 CMOS sensor. The MARS-5000-24GTM/C is capable of 10Gbit/s maximum transfer data rate, and has opto-isolated I/Os. Thanks to locking screw connectors, the MARS cameras can secure the reliability of cameras deployed in harsh environments. The MARS cameras are industrial digital cameras with high reliability and high performance ratio.

Compact, robust, outstanding performance, easy installation and use are especially suitable for machine vision applications such as industrial inspection, medical, scientific research, education, security and so on.

#### Features

- Programmable ROI, increased frame rate with partial scan
- Gain, exposure and white balance programmable (white balance only for color models)
- Support auto gain, auto exposure and auto white balance (auto white balance only for color models)
- Four acquisition controls: Single frame acquisition / Continuous acquisition / Software trigger acquisition / External trigger acquisition
- Trigger mode: Frame Start / Frame Burst Start
- Support Timer, Counter, LUTs and storable user sets
- Support Binning, Decimation, Digital Shift, Reverse X/Y
- Support Black Level, Auto Black Level, Flat Field Correction and Defect Pixel Correction
- Adjustable Gamma and Sharpness for optimizing the brightness and sharpness of images
- Monochrome models support Noise Reduction
- Color models support Light source preset, Color Transformation Control and Saturation
- Support Remove Parameter Limit to expand the range of exposure, gain, white balance, and so on
- Adjustable packet-size and packet-delay, and reserved bandwidth
- 16KB data storage area for saving algorithm coefficients and parameter configuration
- Compatible with GenICam™ and GigE Vision®, can be used in a wide range of 3rd-party software such as HALCON directly
- Optimized software package for 32/64bit Windows 10
- Multiple samples and easy-to-integrate SDKs for various programming tools
- Regulations: GenICam, GigE Vision

### Performance Specifications

Model	MARS-5000-24GTM/C
Interface	10GigE
Resolution	7008(H) × 7000(V)
Frame rate	24 fps
Sensor	2" global shutter Gpixel GMAX3249 CMOS
Pixel size	3.2 μm × 3.2 μm
Pixel Bit Depth	8bit, 12bit
Spectrum	Monochrome / Color
Exposure time	14μs~1s

### Mechanical Specifications

Weight	520g
Dimensions	74(W)×74(H)×60(L) mm, w/o connectors

### Electrical Specifications

Power requirement	12V~24V DC via 12-Pin
I/Os	1 input / 1 output, 1 GPIO
Data interface	RJ45
Power consumption	<10W @24VDC

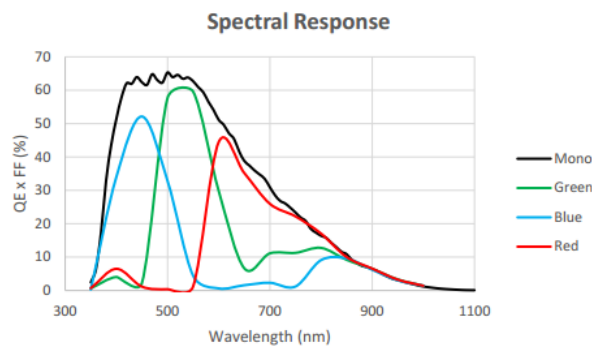
### Environmental Specifications

Operating temp.	0°C ~ +50°C
Storage temp.	-20°C ~ +70°C
Operating humidity	10% ~ 80%

### Optical Specifications

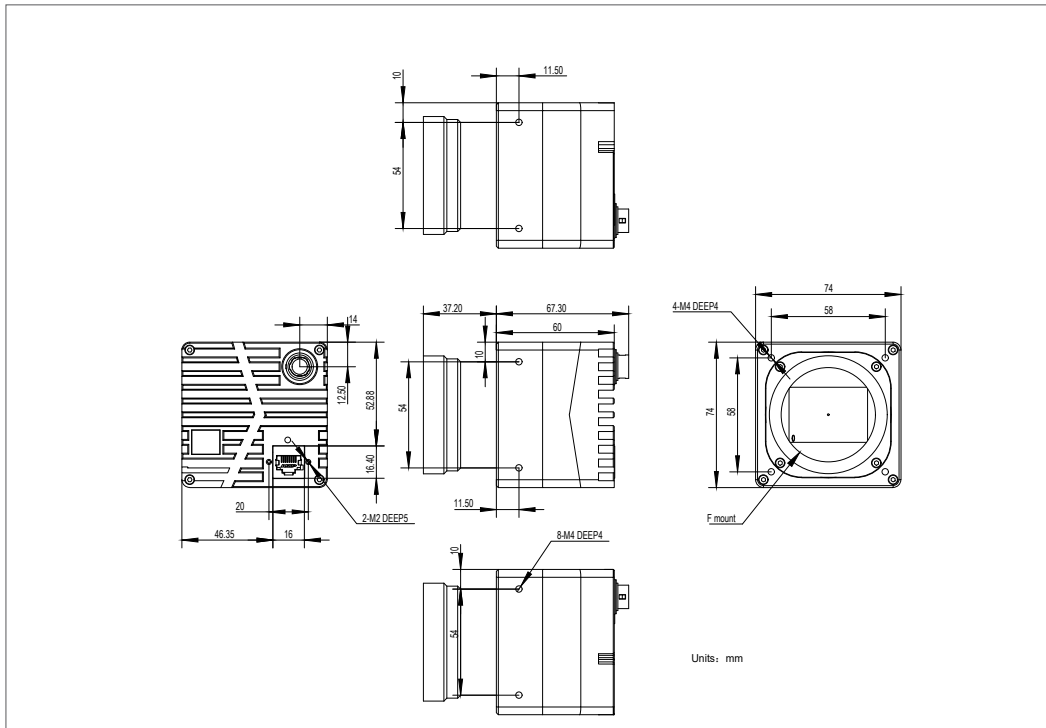
Lens mount	F-Mount / M58-Mount
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### Spectral Response

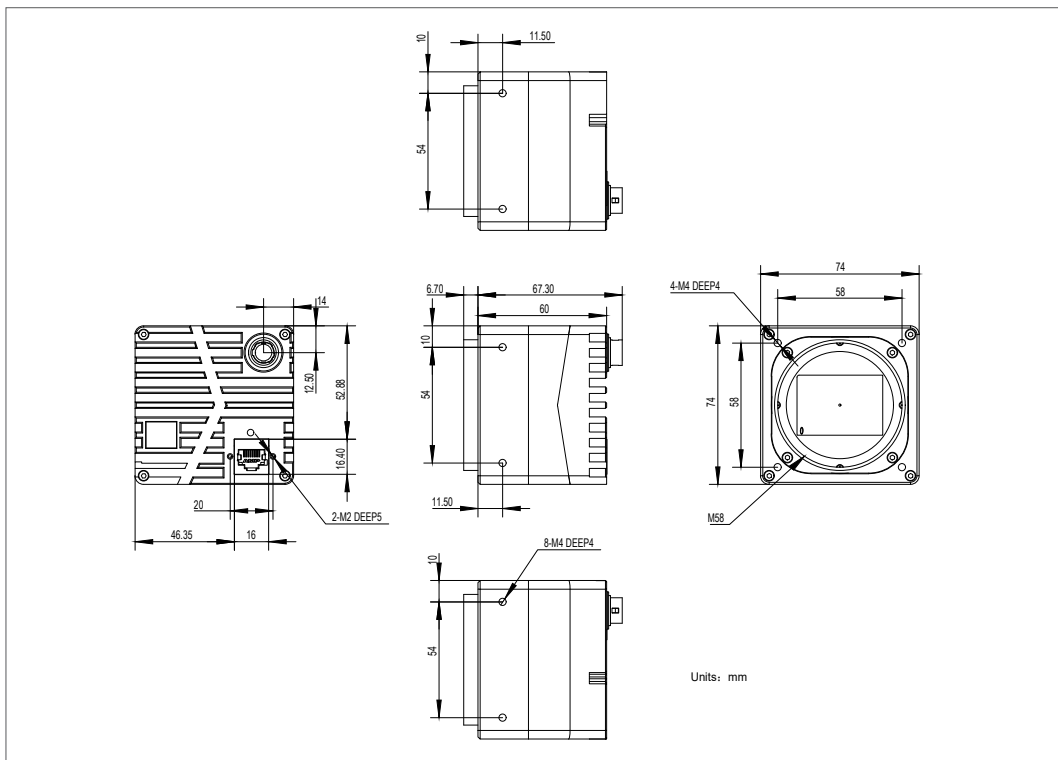


MARS-5000-24GTM/C

# Technical Drawing



MARS-5000-24GTM/C F Mount



MARS-5000-24GTM/C M58 Mount

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